



Thornhill Custom Homes, LLC

Preston Haven | Dallas, TX | ThornhillCustomHomes.com



Photos courtesy of Thornhill Custom Homes

“When we learned it was a Zero Energy Ready Home, we felt like it was right for us.” Home owner



PROJECT DATA

- **Layout:** 6 bdrm, 5.25 bath, 2 fl, 6,471 ft²
- **Climate:** IECC 3A, hot-humid
- **Completed:** August 2016
- **Category:** custom spec

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 44, with PV NA
- **Projected Annual Energy Costs:** without PV \$2,750, with PV \$NA
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,350, with PV \$NA
- **Annual Energy Savings:** without PV 12,500 kWh, 100 MCF, with PV NA

CONTACT

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KEY FEATURES

- **Walls:** 2x6 studs 24" OC, advanced framed, 7/8" OSB sheathing; 1" R-6.5 rigid polyiso with taped seams plus R-21 blown fiberglass for R-28 total wall insulation. Second layer of 30-lb felt and metal lath under stucco and stone. Plastic battens under wood siding.
- **Roof:** 60-mil TPO Cool Roof Certified white roofing membrane over .5/2 pitch "flat roof" w/parapet walls.
- **Attic:** R-30 open-cell spray foam on underside of roof deck/roof trusses plus 1" R-6.5 polyiso closed-cell foam over decking for R-38 total roof.
- **Foundation:** Crawlspace 1" R-7.2 closed-cell rigid foam on interior; 20-mil vapor barrier taped at walls, piers, seams. Rim joists insulated with 5.5" open-cell spray foam.
- **Windows:** Double-pane, wood and fiberglass, low-e3, argon-filled, U=0.26, SHGC=0.23.
- **Air Sealing:** 1.1 ACH 50.
- **Ventilation:** Filtered fresh air intake with controller.
- **HVAC:** Two 96% AFUE furnaces; two AC units 16.2 and 17 SEER w/two-stage condensers.
- **Hot Water:** Tankless gas water heater, .94 EF.
- **Lighting:** 90% LED; motion sensors on exterior lighting.
- **Appliances:** ENERGY STAR dishwasher. ENERGY STAR ceiling fans and exhaust fans.
- **Solar:** Solar ready.
- **Water Conservation:** Low-flow toilets and shower heads. Low-water landscaping.
- **Energy Management System:** Programmable thermostat.
- **Other:** Wired for electric car charging stations. Low-VOC paint. Universal design. Custom open-web trusses to allow for straight hard metal HVAC trunks.

